

# DWR Climate News Digest

June 2018

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The information provided in the DWR Climate News Digest is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management, and is intended to provide educational and thought-provoking material for water managers and water users.

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## TOPICS

### ***Agriculture/Food Production***

#### [As Carbon Dioxide Levels Rise, Major Crops Are Losing Nutrients](#)

[National Public Radio – June 19, 2018]

*“As the level of carbon dioxide in the air continues to rise because of human activity, scientists are trying to pin down how the plants we eat are being affected.”*

#### [The world’s wine industry is adapting to climate change](#)

[CNBC – June 28, 2018]

*“From South Africa’s drought-stricken vineyards, to France’s noble chateaus, to sunny vineyards in Australia and California, growers and winemakers say they are seeing the effects of climate change as temperatures rise, with swings in weather patterns becoming more severe.”*

### ***General Water Management***

#### [LA Is Doing Water Better Than Your City. Yes, That LA](#)

[WIRED – June 12, 2018]

*“With climate change on the horizon, Los Angeles is rushing to pull water from surprising sources. The goal: aqueous independence.”*

#### [Here are three ways that cities can adapt to changing climates](#)

[The Conversation – June 21, 2018]

*“Cape Town’s “Day Zero” experience – the prospect of dam levels dropping dangerously low, taps running dry and water rations being distributed from public collection points – speaks powerfully to the urgency and complexity of climate change adaptation.”*

## ***Sea-Level Rise and other Ocean Impacts***

### **[Short-term changes in Antarctica's ice shelves are key to predicting their long-term fate](#)**

[The Conversation – June 13, 2018]

*“Understanding variations in the height of Antarctic ice shelves – the floating edges of the continent’s ice sheet – can tell us how and why Antarctica is changing, and what that could mean for future sea levels.”*

### **[Sea Level Rise Will Threaten Thousands of California Homes](#)**

[Scientific American – June 18, 2018]

*“Sea-level rise threatens thousands of homes in California by 2035, especially in cities near San Francisco and Los Angeles, according to an analysis.”*

## ***Extreme Weather Events***

### **[Analyzing climate change/hurricane links](#)**

[Yale Climate Connections – June 11, 2018]

*“A review of top research scientists’ views on climate/hurricane links points to areas of increasing scientific consensus, but with key voids still begging high-confidence understanding and answers.”*

### **[Immense rains are causing more flash flooding, and experts say it’s getting worse](#)**

[Washington Post – June 24, 2018]

*“Experts say the immense rains — some spawned by tropical ocean waters, others by once-routine thunderstorms — are the product of long-rising air temperatures and an increase in the sheer size of the storms.”*

## ***Human Health Impacts***

### **[How Climate Changed-Fueled “Mega Droughts” Could Harm Human Health](#)**

[Smithsonian – June 12, 2018]

*“Researchers looked at the little-studied danger of dust and worsening air quality in the American Southwest.”*

### **[Toxic algae problem will 'get worse in a big way' as climate continues to warm](#)**

[Minnesota Public Radio – June 22, 2018]

*“Across the U.S., reservoirs that supply drinking water and lakes used for recreation are experiencing similar events with growing frequency. The trend represents another impact of global warming and raises looming questions about the effects on human health.”*

## ***Tribal Impacts & Traditional Ecological Knowledge***

### **[A Wyoming Reservation Shows the New Face of Drought](#)**

[Scientific American – June 6, 2018]

*“A climate-driven warping of the water cycle is forcing a re-think of water management practices.”*

## ***Wildlife and Ecosystem Impacts***

### **[Trees That Have Lived for Millennia Are Suddenly Dying](#)**

[The Atlantic – June 11, 2018]

*“It’s not just the baobabs, either. Around the world, the creaking deaths of ancient trees are testifying to the period of extraordinary environmental change that we are living through.”*

### **[Looking for signs of global warming? They’re all around you](#)**

[Associated Press – June 19, 2018]

*“But it turns out climate isn’t the only thing that’s changing: Nature itself is, too. That’s the picture painted by interviews with more than 50 scientists and an Associated Press analysis of data on plants, animals, pollen, ice, sea level and more.”*

## ***Greenhouse Gas Mitigation***

### **[California to spend \\$768 million toward cleaning up carbon emission](#)**

[The Christian Science Monitor – June 1, 2018]

*“In order to reach its goal of 5 million zero-emission cars by 2030 the state of California, along with multiple energy corporations, will spend a combined total of \$786 million toward sustainable energy for transportation.”*

### **[Sucking carbon out of the air won’t solve climate change](#)**

[Vox – June 14, 2018]

*“But DAC is an interesting case, a tool that could potentially help in several places where current clean energy technologies are lacking, so let’s take a look at where it fits in and what it can do.”*

## ***Climate Change Modeling***

### **[We are almost certainly underestimating the economic risks of climate change](#)**

[Vox – June 9, 2018]

*“One of the more vexing aspects of climate change politics and policy is the longstanding gap between the models that project the physical effects of global warming and those that project the economic impacts.”*

### **[Could astrobiology research convince us to fight climate change?](#)**

[Popular Science – June 11, 2018]

*“[W]hen you get advanced enough, and start consuming resources and energy at a fast-enough clip you necessarily start to change your home planet on a global scale.”*

## **Climate Change Adaptation**

### **[Why climate change hits poorest countries hardest](#)**

[Axios – June 4, 2018]

*“It's long been said that climate change will be felt earliest and most severely in the poor nations of the world that contributed the least to the problem. A recent study, along with illuminating data from a new World Bank Report, show how this is the case.”*

### **[Climate Change May Already Be Hitting the Housing Market](#)**

[Bloomberg – June 18, 2018]

*“Homes in areas most exposed to flood and hurricane risk were worth less last year, on average, than a decade earlier.”*

## **International Planning**

### **[Paris deal: a year after Trump announced US exit, a coalition fights to fill the gap](#)**

[The Guardian – June 1, 2018]

*“Cities, states and companies are taking their own steps on behalf of the planet. But their power to minimize Trump's damage is limited.”*

### **['Carbon bubble' could spark global financial crisis, study warns](#)**

[The Guardian – June 4, 2018]

*“Plunging prices for renewable energy and rapidly increasing investment in low-carbon technologies could leave fossil fuel companies with trillions in stranded assets and spark a global financial crisis, a new study has found.”*

## **Communicating Climate Change**

### **[TV Meteorologists Unite for Climate Change on The Summer Solstice](#)**

[Forbes – June 19, 2018]

*“On the June 21, 2018 Summer Solstice, over 100 meteorologists will wear an item of clothing like the tie below. The effort is called #MetsUnite.”*

### **[Listening to James Hansen on Climate Change, Thirty Years Ago and Now](#)**

[The New Yorker – June 20, 2018]

*“Thirty years ago, James Hansen, a scientist at NASA, issued a warning about the dangers of climate change. The predictions he and other scientists made at the time have proved spectacularly accurate.”*

## **BLOGS/Commentary**

### **[Why I Won't Debate Science](#)**

[Scientific American – June 14, 2018]

*“Once you put established facts about the world up for argument, you've already lost.”*

[Helping communities cope with climate change](#)

[Capitol Weekly – June 15, 2018]

*“Here in California we experience extreme heat in the summer and floods and fires throughout the year, all made worse by climate change. Unless we take action now to prepare our communities, many will suffer, some more than others.”*

***Additional Items of Interest***

[The moral calculus of climate change](#)

[MIT News – June 4, 2018]

*“The Prisoner’s Dilemma, a strategy scenario that pits cooperation against self-interest, is a perfect way to puzzle over the difficult dilemmas emerging in a rapidly warming world.”*

[Climate Change May Spark Global ‘Fish Wars’](#)

[National Geographic – June 14, 2018]

*“Warming seas are driving commercial seafood poleward into waters controlled by other countries, setting up international conflicts.”*

[Your Morning Cup of Coffee Is in Danger. Can the Industry Adapt in Time?](#)

[TIME – June 21, 2018]

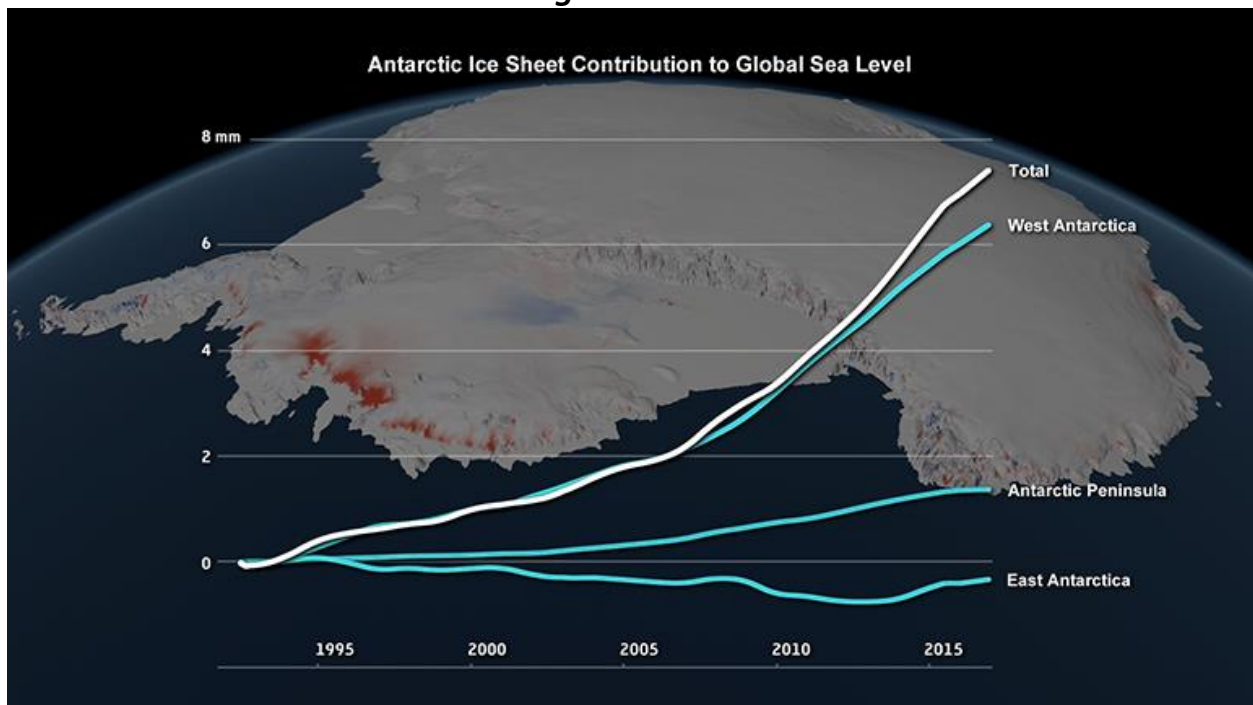
*“As temperatures rise and droughts intensify, good coffee will become increasingly difficult to grow and expensive to buy.”*

[Special report: A 30-year alarm on the reality of climate change](#)

[Axios – June 23, 2018]

*“Three decades have passed since then-NASA scientist James Hansen testified before the Senate Energy committee and alerted the country to the arrival of global warming.”*

### *Images to Ponder*



Changes in the Antarctic ice sheet's contribution to global sea level, 1992 to 2017. Credit: NASA's Ice Sheet Mass Balance Inter-Comparison Exercise (IMBIE).

Ice losses from Antarctica have tripled since 2012, increasing global sea levels by 0.12 inch (3 millimeters) in that timeframe alone, according to an international climate assessment funded by NASA and ESA (European Space Agency).

According to the study, ice losses from Antarctica are causing sea levels to rise faster today than at any time in the past 25 years (figure above).

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